

## Virginia Title V Operating Permit

Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Global Stone Chemstone Corporation
Facility Name:	Global Stone Chemstone Corporation
Facility Location:	1696 Oranda Road Shenandoah County, Virginia
Registration Number:	80252
Permit Number:	VRO80252

July 30, 2002  
Effective Date

July 30, 2007  
Expiration Date

R. Bradley Chewning  
Director, Department of Environmental Quality

July 30, 2002  
Signature Date

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## **I. Facility Information**

### **Permittee**

O-N Minerals (Chemstone) Company

P.O. Box 71

Strasburg, Virginia 22657

### **Responsible Official**

James E. Bottom

Area Operations Manager

### **Facility**

O-N Minerals (Chemstone) Company

P.O. Box 71

1696 Oranda Road

Strasburg, Virginia 22657

### **Contact Person**

David St. Clair

Regional Environmental Manager

(540) 465-5161

**Plant Identification Number:** 51-171-0003

**Facility Description:** SIC Code 3274 – Lime

Global Stone Chemstone Corporation manufactures lime and hydrated lime. The basic processes at the facility in Shenandoah County are (1) quarrying raw limestone, (2) preparing limestone for kilns by crushing and sizing, (3) calcining limestone, (4) processing the lime further by hydrating, and (5) miscellaneous crushing, transfer, storage, handling and loadout operation. There are two types of kilns in operation at this facility. They are a rotary kiln and a calcimatic or rotary hearth kiln.

## II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Precalcination Processes</b>							
U1		Quarry operations including drills, front end loaders, and haul trucks	1500 tons/hr (output)	Wet suppression		PM PM-10	03/05/99
U2		Plant roads and in plant transfers using trucks and loaders		Wet suppression		PM PM-10	03/05/99
U3		Storage piles		Wet suppression		PM PM-10	03/05/99
U4		Primary crushing, washing, and conveying except for equipment included in U4A and U4B (pre 1972)	500 tons/hr (output)	Wet suppression system		PM PM-10	
U4A		Cedar Rapids secondary crusher (installed 1999) Non NSPS Subpart OOO	550 tons/hr	Wet suppression system		PM PM-10	03/05/99
U4B		Simplicity primary screen (installed 1999) NSPS Subpart OOO	550 tons/hr	Wet suppression system		PM PM-10	03/05/99

\*Size/Rated Capacity is provided for informational purposes only and is not an applicable requirement.

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Rotary Kiln System							
U5	S1-S8	Rotary Kiln System (constructed in 1974 and modified in 1981) consisting of a preheater, kiln, and cooler and capable of being fired by coal, natural gas, or distillate oil	135 MMBtu/hr (coal)	Multicyclone	C1	PM PM-10	08/02/73 modified 09/10/81 amended 07/31/00
			125 MMBtu/hr (gas)				
			115 MMBtu/hr (oil)	ICA Senior, Size 8-7500 Fabric Filter	D1	PM PM-10 SO <sub>2</sub>	
			50 tons/hr limestone feed input				
U5A	S9	Rotary Kiln dust handling and storage system		Mikropul 36S-8-30	D2	PM PM-10	08/02/73 modified 09/10/81 amended 07/31/00
U6	S12	Rotary Kiln Coal System including day bin, coal mill, cyclone, feeder	6 tons/hr (output)	Mikropul	D5	PM PM-10	08/02/73 modified 09/10/81 amended 07/31/00
U7	S11	Rotary Kiln crushing, sizing, and lime storage (1973)	four 1000 ton bins one 270 ton granular bin two 50 ton bins one 100 ton briquettes bin	Mikropul	D4	PM PM-10	08/02/73
U8	S10	Rotary Kiln loadout (1973)	10 tons/hr (input)	Torit	D3	PM PM-10	08/02/73

\*Size/Rated Capacity is provided for informational purposes only and is not an applicable requirement.

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Hydration Process</b>							
U9	S13	Hydrator Feed Bin (before 1972)	8 tons/hr (input)	Mikropul 36S-10	D6	PM PM-10	
U10	S14	Hydrator (modified 1987)	10 tons/hr (output)	Ducon Scrubber Size 48, Type UW4	D7	PM PM-10	05/05/87
U11	S15	Hydrator Mill, Storage, and Loadout (before 1972)	3 tons/hr (output)	Mikropul 100 S10 TRH	D8	PM PM-10	
<b>Calcimatic Kiln System</b>							
U12	S16	Calcimatic Kiln System capable of being fired by natural gas, distillate oil, or recycled oil (modified 2001)	60 MMBtu/hr (gas)	Buell multiple cyclones Model 4 BBR #46, Series 43A and a Venturi scrubber	D9, D9B	PM PM-10 SO <sub>2</sub> HCL	05/01/02
			60 MMBtu/hr (oil)				
			16.6 tons/hr limestone feed input (8.3 tons/hr output)				
U12t	-	Fixed roof, horizontal storage tank (installed 2001) NSPS Subpart Kb	25,000 gallons				05/01/02

\*Size/Rated Capacity is provided for informational purposes only and is not an applicable requirement.

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
U13	S19	Calcimatic Cooler , Conveyor, and Roller Lime Mill (before 1972)	8 tons/hr (output)	Mikropul 256-K-10	D9A	PM PM-10	
U14	S21	Calcimatic Processing System including crushers, screens, elevators, conveyors, bins, and truck/rail loadout (before 1972)	one 1000 ton crushed lime bin, one 600 tons sized lime bin one 1000 ton hydrate feed bin one 35 ton briquetter bin one 340 ton tailings bin one 1A 100 ton bin one 1A 200 ton bin one 1000 ton fluxing bin one 100 ton recycle bin	Mikropul 36-10 (East)	D11	PM PM-10	
	S22			Mikropul 36-10 (West)	D12		

\*Size/Rated Capacity is provided for informational purposes only and is not an applicable requirement.



### **III. Process Equipment Requirements – Precalcination Process (U4, U4A, & U4B)**

#### **A. Limitations**

1. All crushers shall be fitted with liquid sprays or other appropriate systems that effectively limit the escape of airborne dust.  
(9 VAC 5-80-110 and 9 VAC 5-40-1840)
2. All feeders, elevators, conveyors, transfer points, discharge points and loading points shall be equipped with collectors, sprays or other means when necessary to minimize the escape of dust.  
(9 VAC 5-80-110 and 9 VAC 5-40-1840)
3. Unless otherwise specified, dust emission controls shall include the following, or equivalent, as a minimum:
  - a. Dust from drills, shot piles, material handling, screens, crushers, load-outs, and traffic areas shall be controlled by wet suppression or equivalent (as approved by the DEQ). The wet suppression spray systems shall be operated at optimum design.
  - b. All material being stockpiled shall be kept moist to control dust during storage and handling or covered at all times to minimize emissions.
  - c. Haul roads shall be controlled by wet suppression.
  - d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.  
(9 VAC 5-80-110, 9 VAC 5-40-1860 and Condition 3 of 3/5/99 Permit)
4. Annual production of crushed stone from secondary crushing from the Cedar Rapids crusher (U4A) shall not exceed 1,000,000 tons, calculated monthly as the sum of each consecutive 12 month period.  
(9 VAC 5-80-110 and Condition 4 of 3/5/99 Permit)
5. Annual production of crushed stone from primary screening from the Simplicity screen (U4B) shall not exceed 1,000,000 tons, calculated monthly as the sum of each consecutive 12 month period.  
(9 VAC 5-80-110 and Condition 5 of 3/5/99 Permit)

6. Particulate emissions from the operation of the Cedar Rapids crusher (U4A) and the Simplicity screen (U4B) shall not exceed the limitations specified below:

	Particulate Matter	
	<u>lbs/hr</u>	<u>tons/yr</u>
Secondary Crushing	0.79	0.72
Primary Screening	4.95	4.50

These emissions are derived from the estimated overall emission contribution. Compliance shall be determined as stated in Conditions III.A.4, III.A.5, III.A.8, and III.A.9.

(9 VAC 5-80-110 and Condition 6 of 3/5/99 Permit)

7. Particulate emissions from each emission unit included in this section (U4, U4A, and U4B) shall not exceed the process weight limit as determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

where:

E = emission rate in lb/hr

P = process weight rate in tons/hr

(9 VAC 5-80-110 and VAC 5-40-1840)

8. Visible emissions from the Cedar Rapids crusher (U4A) shall not exceed 15% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).  
(9 VAC 5-50-80, 9 VAC 5-80-110 and Condition 7 of 3/5/99 Permit)
9. Visible emissions from the Simplicity screen (U4B) shall not exceed 10% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).  
(9 VAC 5-50-80, 9 VAC 5-80-110, 40 CFR 60.672 (b), and Condition 8 of 3/5/99 Permit)
10. Visible emissions from any emission unit included under U4 shall not exceed 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).  
(9 VAC 5-40-1850 and 9 VAC 5-80-110)
11. Except where this permit is more restrictive than the applicable requirement, the Simplicity screen (U4B) shall be operated in compliance with the requirements of 40 CFR 60, Subpart OOO.  
(9 VAC 5-80-110 and Condition 12 of 3/5/99 Permit)

12. In order to minimize the duration and frequency of excess emissions due to malfunctions of air pollution control equipment, the permittee shall:

- a. Develop a maintenance schedule.
- b. Maintain an inventory of spare parts that are needed to minimize durations of air pollution control equipment breakdowns.

(9 VAC 5-80-110 and Condition 20 of 3/5/99 Permit)

## **B. Monitoring and Recordkeeping**

1. The wet suppression spray systems shall be equipped with pressure gauges to indicate system operating pressures. The pressure gauges shall be installed with adequate access for inspection.

(9 VAC 5-80-110 and Condition 3 of 3/5/99 Permit)

2. For each day of operation, the permittee shall perform a daily inspection of the wet suppression spray systems including pumps, pipe system, spray nozzles, and water pressure gauges to ensure proper operation.

(9 VAC 5-80-110)

3. The permittee shall conduct a visible emissions inspection of each piece of equipment included under Emission Units U4, U4A, and U4B at least once every week of operation. All visible emissions inspections must be performed when the equipment is operating at the maximum rate of operation for the day. Each observation period shall be a minimum of 1 minute. If during the inspection visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR Part 60, Appendix A, EPA Method 9, unless timely corrective action is initiated within two hours of the visible emissions inspection such that the equipment operates with no visible emissions within 24 hours of the initial observation. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed the applicable opacity standard for the emissions units in U4, the VEE shall be conducted for a total of 60 minutes or until a violation of the opacity standard for that emission unit has been documented, whichever period is shorter.

(9 VAC 5-80-110)

4. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

- a. Annual production of crushed stone from the Cedar Rapids crusher (U4A), calculated monthly as the sum of each consecutive 12 month period.

- b. Annual production of crushed stone from the Simplicity screen (U4B), calculated monthly as the sum of each consecutive 12 month period.
- c. Daily wet suppression spray system inspection results including:
  - (1) The date, time, and name of person performing each inspection;
  - (2) A list of items inspected;
  - (3) The pressure gauge reading; and
  - (4) Any maintenance or repairs performed as a result of these inspections including date, time, and name of person performing the maintenance or repairs.
- d. Weekly visible emissions inspection results for U4, U4A, and U4B equipment including:
  - (1) The date, time, and name of person performing each inspection;
  - (2) Whether or not there were visible emissions; and
  - (3) Any maintenance or repairs performed as a result of these inspections including date, time, and name of person performing the maintenance or repairs.
  - (4) All VEE results.
  - (5) Scheduled and non-scheduled maintenance.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-50-50, 9 VAC 5-80-110, and Condition 16 of 3/5/99 Permit)

### C. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Methods (40 CFR Part 60, Appendix A)
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

#### **IV. Process Equipment Requirements – Rotary Kiln System (U5-U8)**

##### **A. Limitations**

1. Particulate emissions from the rotary kiln (U5) shall be controlled by a multicyclone (C1) and a fabric filter (D1). The multicyclone (C1) and the fabric filter (D1) shall be provided with adequate access for inspection and shall be in operation when the rotary kiln is operating.  
(9 VAC 5-80-110 and Condition 3 of 07/31/00 Permit)
2. Particulate emissions from the rotary kiln dust handling and storage system (U5A) shall be controlled by a fabric filter (D2). The fabric filter (D2) shall be provided with adequate access for inspection and shall be in operation when the rotary kiln is operating.  
(9 VAC 5-80-110 and Condition 4 of 07/31/00 Permit)
3. Particulate emissions from the rotary kiln coal system (U6) shall be controlled by a fabric filter (D5). The fabric filter (D5) shall be provided with adequate access for inspection and shall be in operation when the rotary kiln coal system is operating.  
(9 VAC 5-80-110 and Condition 5 of 07/31/00 Permit)
4. Particulate emissions from the rotary kiln crushing, sizing, and lime storage bins (U7) shall be controlled by a fabric filter (D4). The fabric filter (D4) shall be provided with adequate access for inspection and shall be in operation when the rotary kiln lime storage bins are being filled.  
(9 VAC 5-80-110 and 08/02/73 Permit)
5. Particulate emissions from the rotary kiln loadout operations (U8) shall be controlled by a fabric filter (D3). The fabric filter (D3) shall be provided with adequate access for inspection and shall be in operation when the rotary kiln lime crushing, sizing, and loadout operations are operating.  
(9 VAC 5-80-110 and 08/02/73 Permit)
6. Fugitive dust controls shall include the following, or equivalent, as a minimum:
  - a. Dust from material handling, and load-outs, shall be controlled by wet suppression or equivalent (as approved by the DEQ).
  - b. Dust from coal offloading, stockpiling, and conveying shall be controlled by a water fogging system.
  - c. All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions.

- d. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.
- e. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-110 and Condition 6 of 07/31/00 Permit)

- 7. The approved fuels for the rotary kiln (U5) are coal, distillate oil, and natural gas. A change in the fuel may require a permit to modify and operate.  
(9 VAC 5-80-110 and Condition 7 of 07/31/00 Permit)

- 8. The coal and distillate oil shall meet the specifications below:

COAL:

Maximum sulfur content per shipment by weight: 1.5%

DISTILLATE OIL that meets the ASTM specification for numbers 1 or 2 fuel oil:

Maximum sulfur content per shipment by weight: 0.5%

(9 VAC 5-80-110 and Condition 9 of 07/31/00 Permit.)

- 9. The input of sulfur in the fuel (as sulfur) to the rotary kiln (U5) shall not exceed 150 pounds per hour and 592.2 tons per year. The annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.  
(9 VAC 5-80-110 and Condition 8 of 07/31/00 Permit.)

- 10. Sulfur dioxide emissions from the rotary kiln (U5) shall not exceed the limit as determined by the following equation:

$$S = 2.64K$$

where:

S = allowable emission of sulfur dioxide expressed in lbs/hr

K = actual heat input at total capacity expressed in Btu x  $10^6$  per hour

(9 VAC 5-80-110 and 9 VAC 5-40-280)

11. Particulate emissions from the operation of the rotary kiln (U5) shall not exceed 0.7 pounds per ton of limestone feed.  
(9 VAC 5-80-110, 9 VAC 5-40-260, and Condition 10 of 07/31/00 Permit)

12. Particulate emissions from the rotary kiln (U5) shall not exceed the process weight limit as determined by the following equation:

$$E = 4.10P^{0.67}$$

where:

E = emission rate in lb/hr

P = process weight rate in tons/hr

(9 VAC 5-80-110 and VAC 5-40-260)

13. Visible emissions from the fabric filter (D1) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).

(9 VAC 5-80-110, 9 VAC 5-50-80, and Condition 11 of 07/31/00 Permit)

14. Visible emissions from the fabric filters (D2 - D5) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).

(9 VAC 5-80-110, 9 VAC 5-50-80, and Condition 11 of 07/31/00 Permit)

15. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures.

(9 VAC 5-80-110 and Condition 19 of 07/31/00 Permit)

16. The permittee shall furnish notification to the Director, Valley Region, of the intention to shut down or bypass, or both, air pollution control equipment for

necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

- a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
- d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-80-110 and Condition 16 of 07/31/00 Permit)

## **B. Monitoring**

1. Each fabric filter (D1-D5) shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filters are operating.

(9 VAC 5-80-110 and Conditions 3, 4, and 5 of 07/31/00 Permit)

2. The permittee shall perform periodic monitoring of the rotary kiln system (U5) as follows:
  - a. Conduct a daily inspection of the rotary kiln system (U5). The inspection shall include an observation of the presence of visible emissions and the pressure drop across the fabric filter (D1). If during the inspection visible emissions are observed, timely corrective action shall be initiated within four hours of the inspection such that the rotary kiln system resumes operation and there are no visible emissions within 24 hours of the initial observation.
  - b. If timely corrective action cannot be taken within the timeframe included in Condition IV.B.2.a, an EPA Method 9 (40 CFR Part 60, appendix A) visible emission evaluation (VEE) shall be conducted on each source of visible emissions. Each VEE shall be conducted for a minimum period of six minutes.

(9 VAC 5-80-110)



3. The permittee shall perform a weekly inspection of emission units U5A, U6, U7, and U8. Each inspection shall include an observation of the presence of visible emissions and the pressure drop across each fabric filter (D2-D5). If during the inspection visible emissions are observed, a visible emission evaluation (VEE) shall be conducted for each source of visible emissions in accordance with 40 CFR Part 60, Appendix A, EPA Method 9 for a minimum of six minutes, unless timely corrective action is initiated within four hours of the inspection such that each emission unit U5A, U6, U7, and U8 resumes operation with no visible emissions within 24 hours of the initial observation. If any of the observations exceed the applicable opacity standard for the emissions unit, the VEE shall be conducted for a total of 60 minutes or until a violation of Condition IV.A. 14 has been documented, whichever period is shorter.  
(9 VAC 5-80-110)
4. The permittee shall conduct an internal inspection on the multicyclone (C1) and on each fabric filter (D1-D5) during periods of shutdown not to exceed once per calendar year to insure structural integrity.  
(9 VAC 5-80-110)
5. The permittee shall determine compliance with the hourly sulfur limit in Condition IV.A.9 as follows:

$$T = \frac{\sum_{i=1}^n S_i F_i}{H}$$

Where:

T = average hourly sulfur throughput (lb/hr)

S<sub>i</sub> = sulfur content of each fuel (i) burned each month (weight percent)

F<sub>i</sub> = number of pounds of each fuel (i) burned each month (lb)

H = number of hours of operation of the rotary kiln each month (hr)

Average hourly sulfur throughput shall be calculated each calendar month.

(9 VAC 5-80-110 and Condition 12 of 07/31/00 Permit)

### C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

1. Hourly (pounds) and annual (tons) input of sulfur in the fuel (as sulfur) to the rotary kiln (U5). The hourly sulfur input shall be calculated as described in Condition IV.B.6. The annual sulfur input shall be calculated monthly as the sum of each consecutive 12 month period.
2. Hours of operation for the rotary kiln on a monthly basis.
3. Fuel analysis records including:
  - a. Types of fuel purchased
  - b. BTU heat value (coal only)
  - c. Sulfur content
  - d. Ash content (coal only)
  - e. Quantity of each fuel burned (in tons or gallons)
4. Daily and weekly inspection results including:
  - a. The date, time, and name of person performing each inspection;
  - b. The pressure drop across the fabric filters;
  - c. Whether or not there were visible emissions including results of any VEE;
  - d. Any maintenance or repairs performed as a result of these inspections including date, time, and name of person performing repairs; and
  - e. All VEE results.
5. Annual internal multicyclone and fabric filter inspection results including:
  - a. The date, time, and name of person performing each inspection
  - b. A list of items inspected; and
  - c. Any maintenance or repairs performed as a result of these inspections including date, time, and name of person performing repairs.
6. Scheduled and unscheduled maintenance.
7. Operator training records including the names of trainees, the date of training and the nature of the training.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 13 of 07/31/00 Permit)

#### D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30 and 9 VAC 5-80-110)
2. Once each permit term, at a frequency not to exceed five years, a performance test shall be conducted for particulate matter (PM) on the rotary kiln (U5) using EPA Method 5 (40 CFR Part 60, Appendix A) or other DEQ approved method. The test shall be performed, and demonstrate compliance with the standard contained in Condition IV.A.11. The test shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Valley Region, within 60 days after test completion and shall conform to the test report format enclosed with this permit.  
(9 VAC 5-50-30 and 9 VAC 5-80-110)
3. Concurrently with the performance tests, Visible Emission Evaluations (VEE), in accordance with 40 CFR, Part 60, Appendix A, Method 9 shall be conducted on the baghouse exhausts (S1-S8). Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the test are to be arranged with the Director, Valley Region. Should conditions prevent concurrent opacity observations, the Director, Valley Region, shall be notified in writing, within seven days, and visible emissions testing is to be rescheduled within 30 days. Rescheduled testing is to be conducted under the same conditions (as possible) as the performance tests. Two copies of the test result shall be submitted to the Director, Valley Region, within 60 days after test completion and shall conform to the test report format enclosed with this permit.  
(9 VAC 5-80-110)
4. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Methods (40 CFR Part 60, Appendix A)
PM/PM-10	EPA Methods 5, 17 or other DEQ approved method
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

**E. Reporting**

The permittee shall submit a report to the Director, Valley Region, in accordance with the following schedule:

Time Period Covered by Report	Report Due Date
January 1 – March 31	June 1
April 1 – June 30	September 1
July 1 – September 30	December 1
October 1 – December 31	March 1

Each quarterly report shall contain, at a minimum, the dates included in the calendar quarter and a summary of the information requested in Condition IV.C.1-3.

(9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 14 of 7/31/00 Permit)

## **V. Process Equipment Requirements – Hydrator System (U9-U11)**

### **A. Limitations**

1. Particulate emissions from the hydrator (U10) shall be controlled by a venturi scrubber (D7). The scrubber shall be provided with adequate access for inspection and shall be in operation when the hydrator is operating.  
(9 VAC 5-80-110 and Part I, Condition 6 of 5/5/87 Permit)

2. Particulate emissions from the hydrator system (U9 & U11) shall be controlled by fabric filters (D6, D8). The fabric filters shall be provided with adequate access for inspection and shall be in operation when the hydrator system is operating.  
(9 VAC 5-80-110 and Part I, Condition 6 of 5/5/87 Permit)

3. Particulate emissions from the operation of the atmosphere hydrator (U10) shall not exceed the limitations specified below:

Particulate Matter	1.0 lb/hr	4.4 tons/yr
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Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.

(9 VAC 5-80-110 and Part I, Condition 5 of 5/5/87 Permit)

4. Particulate emissions from each fabric filter stack (S13 and S15) shall not exceed the process weight limit as determined by the following equation:

$$E = 4.10P^{0.67}$$

where:

E = emission rate in lb/hr

P = process weight rate in tons/hr

(9 VAC 5-80-110 and VAC 5-40-260)

5. The annual production of hydrated lime shall not exceed 87,600 tons, calculated monthly as the sum of each consecutive 12 month period.  
(9 VAC 5-80-110 and Part I, Condition 4 of 5/5/87 Permit)
6. Visible emissions from all exhaust stacks of the lime hydrator system (U9-U11) shall not exceed 5% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).  
(9 VAC 5-80-110 and Part I, Condition 7 of 5/5/87 Permit)

7. All air pollution control equipment operators shall be trained and certified in the proper operation of all such equipment. Certification of training shall consist of a statement of time, place and nature of training provided.  
(9 VAC 5-80-110 and Part II, Condition 5 of 5/5/87 Permit)
8. The permittee shall develop, maintain, and have available to all operators good written operating procedures for all air pollution control equipment. A maintenance schedule for all such equipment shall be established and made available to the Director, Valley Region, for review.  
(9 VAC 5-80-110 and Part II, Condition 6 of 5/5/87 Permit)

## **B. Monitoring**

1. The venturi scrubber (D7) shall be equipped with devices to continuously measure the scrubber liquid flow rate or the scrubber refresh flow rate and the differential pressure drop across the scrubber. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures that include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the scrubber is operating.  
(9 VAC 5-80-110)
2. Each fabric filter (D6 & D8) shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filters are operating.  
(9 VAC 5-80-110)
3. The permittee shall perform periodic monitoring of the hydrator (U10) as follows:
  - a. Conduct a daily inspection of the hydrator. The inspection shall include an observation of the scrubber liquid flow rate or the scrubber refresh flow rate and the pressure drop across the scrubber.
  - b. Conduct a weekly inspection of the hydrator. The inspection shall include an observation of the presence of visible emissions. If during the inspection visible emissions are observed, timely corrective action shall be initiated within four hours of the inspection such that the scrubber resumes operation and there are no visible emissions from the scrubber within 24 hours of the initial observation.
  - c. If timely corrective action cannot be taken within the timeframe included in Condition V.B.3.b, an EPA Method 9 (40 CFR Part 60, appendix A) visible

emission evaluation (VEE) shall be conducted. The VEE shall be conducted for a minimum period of six minutes.

(9 VAC 5-80-110 and Part I, Condition 7 of 5/5/87 Permit)

4. The permittee shall perform a weekly inspection of emission units U9 and U11. Each inspection shall include an observation of the presence of visible emissions and the pressure drop across each fabric filter (D6 & D8). If during the inspection visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR Part 60, Appendix A, EPA Method 9, unless timely corrective action is initiated within four hours of the inspection such that the emission units U9 and U11 resume operation with no visible emissions within 24 hours of the initial observation. The VEE shall be conducted for a minimum of six minutes.  
(9 VAC 5-80-110)
5. The permittee shall conduct an annual internal inspection on the scrubber (D7) and on each fabric filter (D6 & D8) to insure structural integrity.  
(9 VAC 5-80-110)

### **C. Recordkeeping**

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

1. Annual throughput of hydrated lime (in tons), calculated monthly as the sum of each consecutive 12 month period.
2. Daily and weekly hydrator (U10) inspection results including:
  - a. The date, time, and name of person performing each inspection;
  - b. The scrubber liquid flow rate or the scrubber refresh flow rate;
  - c. The pressure drop across the scrubber;
  - d. Whether or not there were visible emissions including results of any VEE; and
  - e. Any maintenance or repairs performed as a result of these inspections including date, time, and name of person performing repairs.
3. Weekly inspection results for U9 and U11 including:
  - a. The date, time, and name of person performing each inspection;

- b. The pressure drop across the fabric filters, if applicable;
  - c. Whether or not there were visible emissions including results of any VEE; and
  - d. Any maintenance or repairs performed as a result of these inspections including name, date and name of person performing repairs.
- 4. All VEE and stack test results
  - 5. Annual scrubber and fabric filter internal inspection results including:
    - a. The date, time, and name of person performing each inspection;
    - b. A list of items inspected; and
    - c. Any maintenance or repairs performed as a result of these inspections including name, date, and name of person performing repairs.
  - 6. Scheduled and unscheduled maintenance, and operator training.
  - 7. The DEQ approved, pollutant specific emission factors and the equations used to demonstrate compliance with Condition V.A.3.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and Part II, Condition 4 of 5/5/87 Permit)

#### **D. Testing**

- 1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30, 9 VAC 5-80-110, and Part II, Condition 3 of 5/5/87 Permit)
- 2. Once each permit term, at a frequency not to exceed five years, a performance test shall be conducted for particulate matter (PM) on the hydrator (U10) using EPA Method 5 (40 CFR Part 60, Appendix A) or other DEQ approved method. The test shall be performed, and demonstrate compliance with the standard contained in Condition V.A.3. The test shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Valley Region, within 60 days after test completion and shall conform to the test report format enclosed with this permit.  
(9 VAC 5-50-30 and 9 VAC 5-80-110)



3. Concurrently with the performance tests, Visible Emission Evaluations (VEE), in accordance with 40 CFR, Part 60, Appendix A, Method 9 shall be conducted on the scrubber exhaust (S14). Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the test are to be arranged with the Director, Valley Region. Should conditions prevent concurrent opacity observations, the Director, Valley Region, shall be notified in writing, within seven days, and visible emissions testing is to be rescheduled within 30 days. Rescheduled testing is to be conducted under the same conditions (as possible) as the performance tests. Two copies of the test result shall be submitted to the Director, Valley Region, within 60 days after test completion and shall conform to the test report format enclosed with this permit.  
(9 VAC 5-80-110)
4. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Methods (40 CFR Part 60, Appendix A)
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

## **VI. Process Equipment Requirements – Calcimatic Kiln System (U12-U14)**

### **A. Limitations**

1. Particulate emissions from the calcimatic kiln (U12) shall be controlled by multiple cyclones (D9) and a venturi scrubber (D9B). The multiple cyclones and the venturi scrubber shall be provided with adequate access for inspection and shall be in operation when the calcimatic kiln (U12) is operating.  
(9 VAC 5-80-110 and Condition 3 of 5/1/02 Permit)
2. Particulate emissions from the calcimatic cooler, conveyor, and roller lime mill (U13) shall be controlled by a fabric filter (D9A). The fabric filter shall be provided with adequate access for inspection.  
(9 VAC 5-80-110)
3. Particulate emissions from the calcimatic processing system including crushers, screens, elevators, conveyors, bins, and truck/rail loadout shall be controlled by two fabric filters (D11 & D12). The fabric filters shall be provided with adequate access for inspection.  
(9 VAC 5-80-110)
4. Fugitive emission controls shall include the following, or equivalent, as a minimum:
  - a. Dust from material handling, and load-outs, shall be controlled by wet suppression or equivalent (as approved by the DEQ).
  - b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions.
  - c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.
  - d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.  
(9 VAC 5-80-110 and Condition 4 of 5/1/02 Permit)
5. The production of lime shall not exceed 70,000 tons/yr, calculated monthly as the sum of each consecutive 12 month period.  
(9 VAC 5-80-110 and Condition 7 of 5/1/02 Permit)

6. The approved fuels for the calcimatic kiln (U12) are natural gas, distillate oil, and recycled fuel oil. A change in the fuels may require a permit to modify and operate. (9 VAC 5-80-110 and Condition 8 of 5/1/02 Permit)
7. The calcimatic kiln (U12) shall consume no more than 469 mmcf/yr of natural gas, calculated monthly as the sum of each consecutive 12 month period. (9 VAC 5-80-110 and Condition 9 of 5/1/02 Permit)
8. The calcimatic kiln (U12) shall consume no more than 3,451,000 gal/yr of distillate oil, calculated monthly as the sum of each consecutive 12 month period. (9 VAC 5-80-110 and Condition 10 of 5/1/02 Permit)
9. The calcimatic kiln (U12) shall consume no more than 3,451,000 gal/hr of recycled fuel oil, calculated monthly as the sum of each consecutive 12 month period. (9 VAC 5-80-110 and Condition 11 of 5/1/02 Permit)
10. The fuel shall meet the specifications below:

DISTILLATE OIL that meets the ASTM specification for numbers 1 or 2 fuel oil:

Maximum sulfur content per shipment by weight:	0.5%
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RECYCLED FUEL OIL which meets the following specifications:

Maximum sulfur content per shipment	0.5%
Maximum ash content per shipment	0.7%
Maximum PCB content (parts per million)	2
Maximum total halogen content (parts per million)	1000
Maximum lead content (parts per million)	50
Maximum arsenic content (parts per million)	5
Maximum cadmium content (parts per million)	2
Maximum chromium content (parts per million)	10

(9 VAC 5-80-110 and Condition 12 of 5/1/02 Permit)

11. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier;
  - b. The date on which the distillate oil was received;
  - c. The volume of distillate oil delivered in the shipment;
  - d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications for numbers 1 or 2 fuel oil; and

- e. The sulfur content of the distillate oil.

(9 VAC 5-80-110 and Condition 13 of 5/1/02 Permit)

12. The permittee shall obtain a certification from the fuel supplier with each shipment of recycled fuel oil. Each fuel supplier certification shall include the following:

- a. The name of the fuel supplier;
- b. The date on which the recycled fuel oil was received;
- c. The volume of recycled fuel oil delivered in the shipment;
- d. The content of arsenic, cadmium, chromium, lead, PCBs, and total halogens of the recycled fuel oil in parts per million, by weight;
- e. The sulfur and ash content of the recycled fuel oil;
- f. Documentation of sampling of the oil indicating the location of the recycled fuel oil when the sample was drawn; and
- g. The test methods used to determine the contaminant levels of the recycled fuel oil.

(9 VAC 5-80-110 and Condition 14 of 5/1/02 Permit)

13. Emissions from the operation of the calcimatic kiln (U12) shall not exceed the limits specified below:

Particulate Matter	0.040 gr/dscf
PM-10	0.040 gr/dscf
Sulfur Dioxide	7.52 lbs/hr
Nitrogen Dioxide	9.82 lbs/hr
Carbon Monoxide	14.54 lbs/hr

(9 VAC 5-80-110, 9 VAC 5-40-260, 9 VAC 5-40-280, and Condition 15 of 5/1/02 Permit)

14. Emissions from the operation of the calcimatic kiln (U12) shall not exceed the limits specified below:

Particulate Matter	56.3	tons/yr
PM-10	56.3	tons/yr
Sulfur Dioxide	31.7	tons/yr
Nitrogen Dioxide	41.4	tons/yr
Carbon Monoxide	61.1	tons/yr

Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.

(9 VAC 5-80-110 and Condition 16 of 5/1/02 Permit)

15. Particulate emissions from each of the calcimatic kiln system stacks (S21, S22) shall not exceed the process weight limit as determined by the following equation:

$$E = 4.10P^{0.67}$$

where:

E = emission rate in lb/hr

P = process weight rate in tons/hr

(9 VAC 5-80-110 and 9 VAC 5-40-260)

16. Visible emissions from the calcimatic kiln (U12) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity as determined by EPA Method 9 (reference 40 CFR Part 60, Appendix A). This condition applies at all times except during start-up, shutdown, and malfunction.

(9 VAC 5-80-110, 9 VAC 5-50-80, and Condition 17 of 5/1/02 Permit)

17. Visible emissions from the calcimatic kiln system (U13, U14) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity.

(9 VAC 5-40-80 and 9 VAC 5-80-110)

18. The fixed roof, horizontal storage tank (U12t) shall be used only for the storage of recycled fuel oil or distillate fuel oil. A change in the material stored may require a permit to modify and operate.

(9 VAC 5-80-110 and Condition 18 of 5/1/02 Permit)

19. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures

(9 VAC 5-80-110 and Condition 26 of 5/1/02 Permit)

## **B. Monitoring**

1. The venturi scrubber (D9B) shall be equipped with devices to continuously measure the scrubber liquid flow rate, exit gas temperature, and the differential pressure drop across the scrubber. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the venturi scrubber is operating.

(9 VAC 5-80-110 and Condition 5 of 5/1/02 Permit)

2. Each fabric filter (D9A, D11& D12) shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filter is operating.

(9 VAC 5-80-110)

3. The permittee shall perform periodic monitoring of the calcimatic kiln system (U12) as follows:

- a. Conduct a daily inspection of the calcimatic kiln system (U12). The inspection shall include an observation of the presence of visible emissions, the pressure drop across the venturi scrubber, the scrubber liquid flow rate, and the exit gas temperature. If during the inspection visible emissions are observed, timely corrective action shall be initiated within four hours of the inspection such that the calcimatic kiln system resumes operation and there are no visible emissions within 24 hours of the initial observation.

- b. If timely corrective action cannot be taken within the timeframe included in Condition VI.B.3.a, an EPA Method 9 (40 CFR Part 60, appendix A) visible emission evaluation (VEE) shall be conducted on each source of visible emissions. Each VEE shall be conducted for a minimum period of six minutes. If any of the observations exceed the applicable opacity standard for the emissions unit, the VEE shall be conducted for a total of 60 minutes or until a violation of the opacity standard for that emission unit has been documented, whichever period is shorter.

(9 VAC 5-80-110 and Condition 6 of 5/1/02 Permit)

4. The permittee shall perform weekly inspections of the emission units U13 and U14. Each inspection shall include an observation of the presence of visible emissions and the pressure drop across the fabric filters (D9A, D11 & D12). If during the inspection, visible emissions are observed, an EPA Method 9 (40 CFR Part 60, Appendix A) visible emission evaluation (VEE) shall be conducted unless timely corrective action is initiated within four hours of the inspection such that the emission unit resumes operation with no visible emissions within 24 hours of the initial observation. If any of the observations exceed the applicable opacity standard for the emissions unit, the VEE shall be conducted for a total of 60 minutes or until a violation of the opacity standard for that emission unit has been documented, whichever period is shorter.

(9 VAC 5-80-110)

5. The permittee shall conduct an annual internal inspection on the cyclones (D9), the venturi scrubber (D9B), and the fabric filters (D9A, D11 & D12) to ensure structural integrity.

(9 VAC 5-80-110)

### **C. Recordkeeping**

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

1. Annual production of lime (in tons) from the calcimatic kiln (U12), calculated monthly as the sum of each consecutive 12 month period.
2. Annual throughput of natural gas (in mmcf), distillate oil (in gallons), and recycled fuel oil (in gallons) for the calcimatic kiln (U12), calculated monthly as the sum of each consecutive 12 month period.
3. All fuel supplier certifications.

4. Operation and control device monitoring records for the calcimatic kiln (U12).
5. Scheduled and unscheduled maintenance, and operator training.
6. Dimensions of the storage tank (U12t) and an analysis showing the capacity of the storage tank. This record shall be kept for the life of the storage tank.
7. Daily calcimatic kiln system inspection results including:
  - a. The date, time, and name of person performing each inspection;
  - b. The pressure drop across the venturi scrubber, the scrubber liquid flow rate, and the exit gas temperature;
  - c. Whether or not there were visible emissions including results of any VEE;
  - d. Any maintenance or repairs performed as a result of these inspections including date, time, and name of person performing repairs; and
  - e. All VEE results.
8. Weekly inspection results for emission units U13 and U14 including:
  - a. The date, time, and name of person performing each inspection;
  - b. The pressure drop across the fabric filter;
  - c. Whether or not there were visible emissions including results of any VEE; and
  - d. Any maintenance or repairs performed as a result of these inspections including date, time, and name of person performing repairs.
9. Stack test and VEE results.
10. Annual cyclone, venturi scrubber, and fabric filter internal inspection results including:
  - a. The date, time, and name of person performing each inspection;
  - b. A list of items inspected; and
  - c. Any maintenance or repairs performed as a result of these inspections including date, time, and name of person performing repairs.



11. Fuel purchase records.

12. The DEQ approved, pollutant specific emission factors and the equations used to demonstrate compliance with Conditions VI.A.13 and VI.A.14.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110, 40 CFR 60.116b, and Condition 19 of 5/1/02 Permit)

**D. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations or in accordance with the applicable performance specification (reference 40 CFR Part 60, Appendix B) (9 VAC 5-40-30, 9 VAC 5-80-110, Condition 21 of 5/1/02 Permit)

2. Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations from the calcimatic kiln (U12) to demonstrate compliance with the visible emission limits contained in Condition VI.A.16 of this permit.  
(9 VAC 5-50-30 G, 9 VAC 5-80-110, and Condition 20 of 5/1/02 Permit)
3. Once each permit term, at a frequency not to exceed five years, a performance test shall be conducted for particulate matter (PM), nitrogen oxides (as NO<sub>2</sub>), and carbon monoxide (CO) on the calcimatic kiln (U12) using EPA Methods 5, 7 and 10 (40 CFR Part 60, Appendix A). The tests shall be performed, and demonstrate compliance with the emission limits contained in Condition VI.A.13. The test shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Valley Region, within 60 days after test completion and shall conform to the test report format enclosed with this permit.  
(9 VAC 5-50-30 and 9 VAC 5-80-110)
4. Concurrently with the performance tests, Visible Emission Evaluations (VEE), in accordance with 40 CFR, Part 60, Appendix A, Method 9 shall be conducted on the venturi scrubber (D9B). Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the test are to be arranged with the Director, Valley Region. Should conditions prevent concurrent opacity observations, the Director, Valley Region, shall be notified in writing, within seven days, and visible emissions testing is to be rescheduled within 30 days. Rescheduled testing is to be conducted under the same conditions (as possible) as the performance tests. Two copies of the test result shall be submitted to the Director, Valley Region, within 60 days after test completion and shall conform to the test report format enclosed with this permit.  
(9 VAC 5-80-110)
5. If testing is conducted in addition to the monitoring and testing already specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Methods (40 CFR Part 60, Appendix A)
PM/PM-10	EPA Methods 5, 17
SO <sub>2</sub>	EPA Method 6
NO <sub>x</sub>	EPA Method 7
CO	EPA Method 10
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

#### **E. Notifications**

1. The permittee shall furnish notification to the Director, Valley Region, of the intention to shut down or bypass, or both, air pollution control equipment for

necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

- a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
- d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-80-110 and Condition 22 of 5/1/02 Permit)

2. The permittee shall furnish notification to the Director, Valley Region, of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but not later than four daytime business hours of the malfunction. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within 14 days of the occurrence. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Valley Region, in writing.

(9 VAC 5-20-180C, 9 VAC 5-80-110, and Condition 23 of 5/1/02 Permit)

## **VII. Facility Wide Conditions – Fugitive Dust Sources (U1 – U3)**

### **A. Limitations**

1. Visible emissions from the facility's fugitive dust sources (U1-U3) shall not exceed 20% opacity except during one six-minute average in any one hour in which visible emissions shall not exceed 30% opacity.  
(9 VAC 5-80-110 and 9 VAC 5-50-80)
2. The permittee shall take reasonable precautions to prevent fugitive dust from becoming airborne. Such reasonable precautions may include, but are not limited to the following:
  - a. Dust from drills, shot piles, material handling, load-outs, and traffic areas shall be controlled by wet suppression or equivalent (as approved by the DEQ).
  - b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions.
  - c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.
  - d. Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion;
  - e. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-110 and 9 VAC 5-50-90)

3. In order to minimize the duration and frequency of excess emissions, the permittee shall develop a Dust Control Plan that outlines the preventative measures to be implemented for fugitive dust control at the facility. The plan shall be submitted in writing for approval by the Director, Valley Region, within 90 days of the effective date of this permit and shall include the following as a minimum:
  - a. Identification of the personnel responsible for overseeing fugitive dust control;
  - b. Description and the frequency of measures to be taken to prevent excess emissions from drills, shot piles, material handling, and load-outs;

- c. Description and the frequency of measures to be taken to prevent excess emissions from storage piles and stockpiling operations;
- d. Description and the frequency of measures to be taken to prevent fugitive dust from haul roads and other unpaved surfaces;
- e. Description and the frequency of measures to be taken to prevent fugitive dust from conveying or transporting materials;
- f. Description and the frequency of measures to be taken to prevent deposition of dirt on paved surfaces within the facility and access roads entering the facility.

(9 VAC 5-80-110)

## **B. Monitoring and Recordkeeping**

1. At least once per day, the permittee shall visually survey the trafficable roads at the facility for any sources of excessive fugitive emissions. For the purpose of this survey, excessive fugitive emissions are considered to be any visible emissions that leave the facility site boundaries. The presence of excessive fugitive emissions shall require further investigation as to the cause of the emissions and timely corrective action shall be taken within one hour of the visual survey. If water is used to control the fugitive dust emissions, the permittee shall take care not to create a water quality problem from surface water runoff. All observations and corrective actions taken shall be logged and recorded.  
(9 VAC 5-80-110)
2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:
  - a. A copy of the DEQ approved Dust Control Plan;
  - b. Daily logs of the visual survey of the trafficable roads at the facility to include the following:
    - (1) The date, time and name of the person performing each inspection;
    - (2) Whether or not excessive fugitive emissions are observed and the suspected cause of such emissions;
    - (3) The date, time, and type of corrective actions taken.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110)

### C. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Methods (40 CFR Part 60, Appendix A)
Visible Emission	EPA Methods 9 and 22

(9 VAC 5-80-110)

### VIII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (9 VAC 5-80-720 C)
U18	No. 2 fuel oil storage tank – above ground Installed in 1973	9 VAC 5-80-720B.2	VOC	100,000 gallons
U19	Two diesel fuel tanks – above ground Installed in 1975	9 VAC 5-80-720B.2	VOC	100,000gallons; 200,000 gallons
U20	Gasoline storage tank – above ground	9 VAC 5-80-720B.2	VOC	3,000 gallons
U21	Zepp parts washer	9 VAC 5-80-720B.2	VOC	500 gallons per year throughput
U22	Storage tanks for antifreeze and lubricants	9 VAC 5-80-720C.3	VOC	<550 gallons
U23	Waste oil tank	9 VAC 5-80-720C.2	VOC	1500 gallons
U24	Three diesel generators (quarry lights)	9 VAC 5-80-720C.4.b	PM-10,NO <sub>x</sub> , SO <sub>2</sub> , VOC, CO	35 HP each
U26	FHA furnaces for building space heat (natural gas-fired)	9 VAC 5-80-720C.2.a	PM-10,NO <sub>x</sub> , SO <sub>2</sub> , VOC, CO	< 10 MMBtu/hr heat input
U27	FHA furnace for shop space heat (oil-fired)	9 VAC 5-80-720C.2.a	PM-10,NO <sub>x</sub> , SO <sub>2</sub> , VOC, CO	< 1 MMBtu/hr heat input

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

## IX. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed in compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR Part 60, Subpart HH (U5)	New Source Performance Standards for Lime Manufacturing Plants	Built before 5/3/77; use of coal starting in 1981, not a modification per 40 CFR 60.14(P)
40 CFR Part 60, Subpart OOO Cedar Rapids Crusher (U4A)	New Source Performance Standard for Nonmetallic Mineral Processing Plants	Crusher manufactured in 1979. Subpart only applies to units manufactured after 8/31/83.
40 CFR Part 60, Subpart Y (U6)	Standards of Performance for Coal Preparation Plants	Processes less than 200 tons/day [40 CFR 60.250 (a)]
9 VAC 5-40-1980 (U6)	Particulate Standard for Coal Preparation Plants	Only applies to thermal dryers and pneumatic coal-cleaning equipment.
40 CFR Part 60, Subparts K, Ka, Kb (Tanks U18, U19, U20, U23)	Standards of Performance for Storage Vessels	Tanks U18 & U19 store No. 2 fuel oil and were constructed prior to 1978. Tanks U20 & U23 capacities are 3000 and 1500 gallons respectively.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.  
(9 VAC 5-80-140)



## **X. General Conditions**

### **A. Federal Enforceability**

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

### **B. Permit Expiration**

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless a timely and complete renewal application consistent, with 9 VAC 5-80-80, has been submitted, to the Department, by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

### C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements.
  - b. The date(s) analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses.
  - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
- b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

(1) Exceedance of emissions limitations or operational restrictions;

(2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

(3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”

(9 VAC 5-80-110 F)

#### **D. Annual Compliance Certification**

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)  
U. S. Environmental Protection Agency, Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

**E. Permit Deviation Reporting**

The permittee shall notify the Director, Valley Region, within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition X.C.3. of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

**F. Failure/Malfunction Reporting**

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours, notify the Director, Valley Region, by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Valley Region.

(9 VAC 5-20-180 C)

**G. Severability**

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

**H. Duty to Comply**

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

**I. Need to Halt or Reduce Activity not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

**J. Permit Action for Cause**

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.  
(9 VAC 5-80-110 G.4)
2. Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:
  - a. Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or of a source, where there is, or there is potential of, a resulting emissions increase;
  - b. Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;
  - c. Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, or by 9 VAC 5-80-11, unless such an increase is authorized by an emissions cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;
  - d. Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;
  - e. Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;
  - f. Addition of an emissions unit which qualifies as insignificant by emissions rate (9 VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);

- g. Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and 9 VAC 5-80-720 B and 9 VAC 5-80-720 C.

(9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

#### **K. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege.  
(9 VAC 5-80-110 G.5)

#### **L. Duty to Submit Information**

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.  
(9 VAC 5-80-110 G.6)
2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.  
(9 VAC 5-80-110 K.1)

#### **M. Duty to Pay Permit Fees**

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.  
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

#### **N. Fugitive Dust Emission Standards**

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

#### **O. Startup, Shutdown, and Malfunction**

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20)

#### **P. Alternative Operating Scenarios**

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

#### **Q. Inspection and Entry Requirements**

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

#### **R. Reopening For Cause**

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

#### **S. Permit Availability**

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)



## **T. Transfer of Permits**

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.  
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)

## **U. Malfunction as an Affirmative Defense**

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
  - b. The permitted facility was at the time being properly operated.
  - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
  - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit

requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.
4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

#### **V. Permit Revocation or Termination for Cause**

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-260)

#### **W. Duty to Supplement or Correct Application**

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

#### **X. Stratospheric Ozone Protection**

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

**Y. Accidental Release Prevention**

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

**Z. Changes to Permits for Emissions Trading**

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

**AA. Emissions Trading**

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)